

ENZYME CATALYZED THERAPEUTIC ACTIVATION

CROSS-REFERENCE TO RELATED APPLICATIONS

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This application claims priority under 35 U.S.C. § 119(e) to the following U.S. provisional applications, U.S. Serial Nos.: 60/145,356; 60/145,437; and 60/191,315, filed July 22, 1999; July 23, 1999 and March 21, 2000, respectively, the contents of which are hereby incorporated by reference into the present disclosure.

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TECHNICAL FIELD

The present invention relates to the field of drug discovery and specifically, the design of prodrugs that are substrates for endogenous intracellular enzymes that are overexpressed in pathological cells.

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BACKGROUND OF THE INVENTION

Throughout and within this disclosure, various publications are referenced by first author and date, patent number or publication number. The full bibliographic citation for each reference can be found within the specification or at the end of this application, immediately preceding the claims. The disclosures of these publications are hereby incorporated by reference into this disclosure to more fully describe the state of the art to which this invention pertains.

Cancer is one of the most commonly fatal human diseases worldwide. Treatment with anticancer drugs is an option of steadily increasing importance, especially for systemic malignancies or for metastatic cancers that have passed the state of surgical curability. Unfortunately, the subset of human cancer types that are amenable to curative treatment today is still rather small (Haskell, C.M. (1995)) resulting in about 600,000 deaths per year. See, Cancer Facts & Figures, 1999 American Cancer Society. Progress in the development of drugs that can cure human cancer is slow, with success limited to a few hematological malignancies and fewer solid tumor types (Dorr and Van Hoff (1994)). Progress in discovering therapies that

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